

Federal Railroad Administration



Prevention of Railroad Trespass Casualties: Accidental and Intentional

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Railroad Trespassing: A National Problem – 3/25/2015



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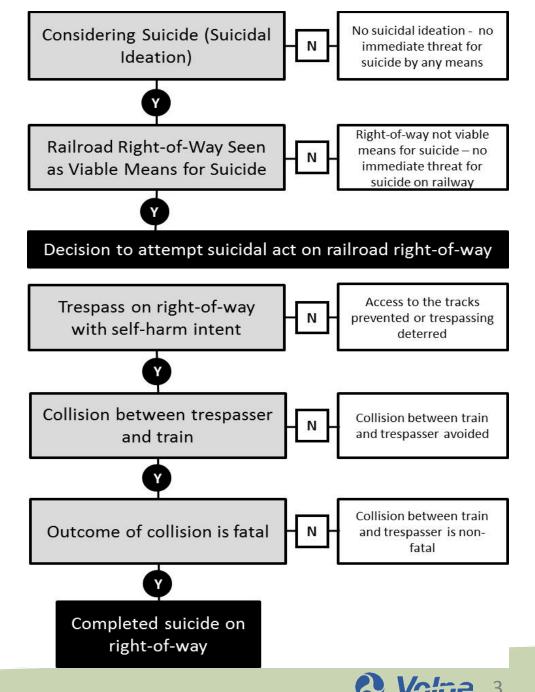
Types of trespass casualties

- <u>Accidental</u> Intent of the trespasser is to safely cross or walk along the tracks, however, they misjudge or are unaware of the oncoming train.
- <u>Intentional</u> Intent of the trespasser is to be struck and killed by the train; a suicide or suicide attempt.
- □ Trespassing on the right-of-way is illegal regardless of intent
- Both types of trespassing must be considered to develop effective countermeasures

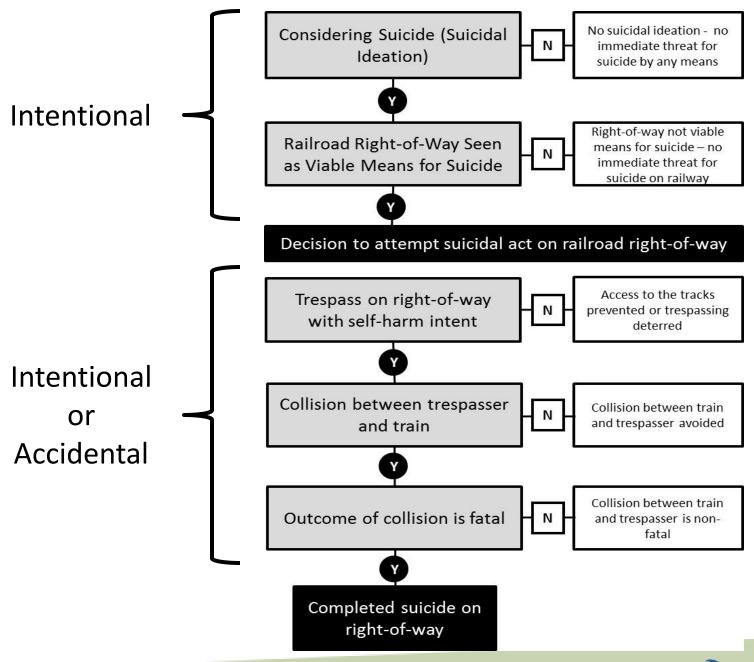


Potential Countermeasures to Mitigate Suicides on Rights-of-Way

- Our team recently published a paper describing proposed countermeasures to mitigate suicides on the rights-of-way*
- Not all proposed countermeasures are recommended or likely to be effective
- Diagram presents points of intervention where countermeasures may be implemented

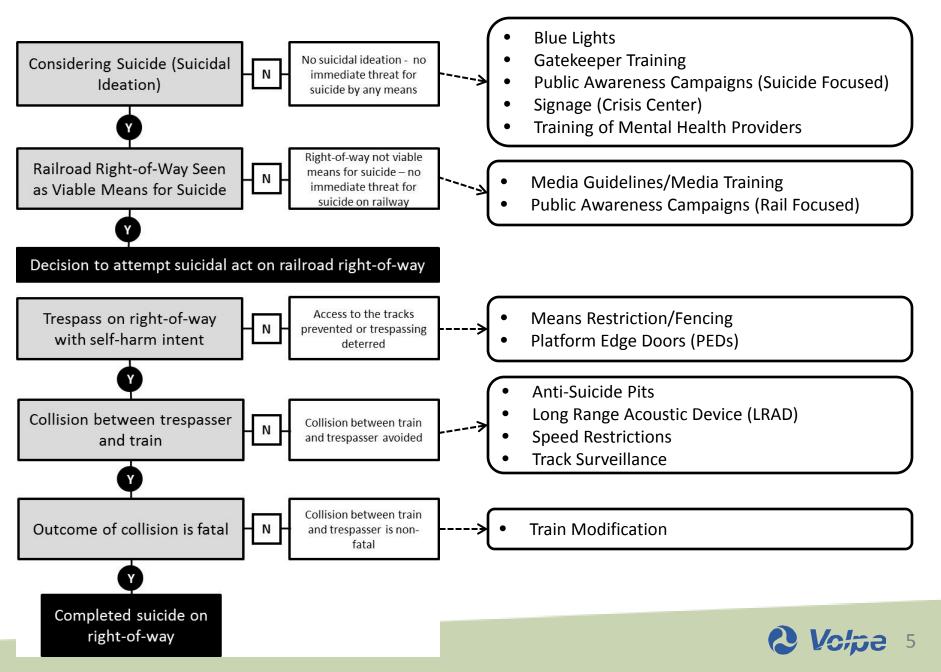


* http://www.fra.dot.gov/eLib/details/L16102#p1_z5_gD_kcountermeasures





Points of Intervention – Proposed Countermeasures



Public Awareness Campaigns (Railroad Focused)

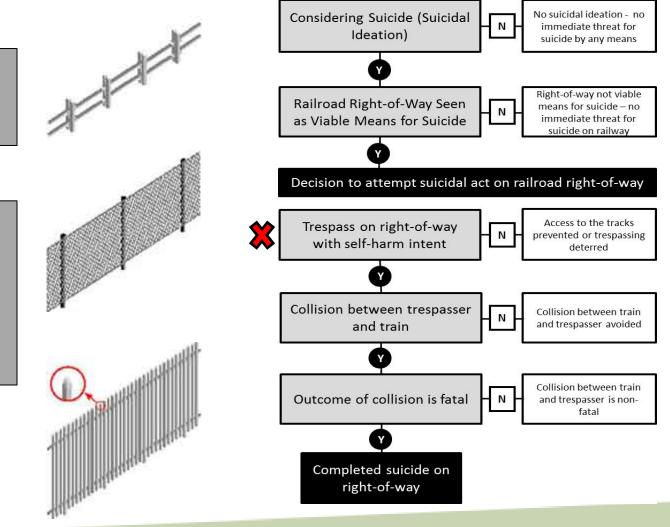
No suicidal ideation - no Considering Suicide (Suicidal Ν immediate threat for Such campaigns are used widely around Ideation) suicide by any means the world and in the US. True impact is not well understood. Right-of-way not viable Railroad Right-of-Way Seen means for suicide - no Ν as Viable Means for Suicide immediate threat for suicide on railway Potential for unintended increase in suicide Decision to attempt suicidal act on railroad right-of-way if not phrased carefully (e.g., inadvertent advertising of a means of suicide) Access to the tracks Trespass on right-of-way prevented or trespassing N with self-harm intent deterred Collisions between semi-trucks and trains make up 25% of all vehicle-train collisions Collision between trespasser Collision between train N and trespasser avoided AND TRAI and train Collision between train Outcome of collision is fatal N and trespasser is nonfatal Completed suicide on right-of-way The Advance Warning Sign warns drivers the road crosses railroad tracks ahead. This means you should SLOW DOWN, LOOK & LISTEN for the sound of a train, and BE PREPARED TO STOP.

Means Restriction/Fencing

Used throughout the railroad community around the world.

Exact impact is not well documented.

Both maintenance and installation costs should be considered.





Summary

- Many countermeasures have been proposed to mitigate trespass casualties, but little evidence of true impact
 - More research is needed to evaluate the effectiveness of proposed countermeasures
- Current lack of confidence in the differentiation between two types of trespass
 - Further refine tools to determine cause of death and fill other known data gaps
- Countermeasures cannot distinguish the intent of the trespasser, so both intentional and accidental must be considered
 - Be aware of unintended consequences, for example how a focus on lethality may impact suicides









Thank you!

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